

ABSTRACT OF THE DISCLOSURE

Problems encountered in the conventional inspection method and the conventional apparatus adopting the method are solved by the present invention using an electron beam by providing a novel inspection method and an inspection apparatus adopting the novel method which are capable of increasing the speed to scan a specimen such as a semiconductor wafer.

The inspection novel method provided by the present invention comprises the steps of: generating an electron beam; converging the generated electron beam on a specimen by using an objective lens; scanning the specimen by using the converged electron beam; continuously moving the specimen during scanning; detecting charged particles emanating from the specimen at a location between the specimen and the objective lens and converting the detected charged particles into an electrical signal; storing picture information conveyed by the electrical signal; comparing a picture with another by using the stored picture information; and detecting a defect of the specimen.